

Gianfranco Fornaro

List of Publications by Year in descending order

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92
papers

8,160
citations

71102

41
h-index

79698

73
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95
all docs

95
docs citations

95
times ranked

4041
citing authors

#	ARTICLE	IF	CITATIONS
1	A new algorithm for surface deformation monitoring based on small baseline differential SAR interferograms. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 2375-2383.	6.3	3,412
2	Three-dimensional focusing with multipass SAR data. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 507-517.	6.3	260
3	Three-dimensional multipass SAR focusing: experiments with long-term spaceborne data. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 702-714.	6.3	254
4	Advanced low- and full-resolution DInSAR map generation for slow-moving landslide analysis at different scales. Engineering Geology, 2010, 112, 29-42.	6.3	253
5	Geometrical SAR image registration. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 2861-2870.	6.3	239
6	Four-Dimensional SAR Imaging for Height Estimation and Monitoring of Single and Double Scatterers. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 224-237.	6.3	234
7	Trajectory deviations in airborne SAR: analysis and compensation. IEEE Transactions on Aerospace and Electronic Systems, 1999, 35, 997-1009.	4.7	224
8	CAESAR: An Approach Based on Covariance Matrix Decomposition to Improve Multibaseline Multitemporal Interferometric SAR Processing. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 2050-2065.	6.3	203
9	Spotlight SAR data focusing based on a two-step processing approach. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1993-2004.	6.3	186
10	Generation of digital elevation models by using SIR-C/X-SAR multifrequency two-pass interferometry: the Etna case study. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 1097-1114.	6.3	116
11	Bridge Thermal Dilation Monitoring With Millimeter Sensitivity via Multidimensional SAR Imaging. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 677-681.	3.1	115
12	Detection of Single Scatterers in Multidimensional SAR Imaging. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2284-2297.	6.3	114
13	Tomographic Imaging and Monitoring of Buildings With Very High Resolution SAR Data. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 661-665.	3.1	108
14	Tomographic Processing of Interferometric SAR Data: Developments, applications, and future research perspectives. IEEE Signal Processing Magazine, 2014, 31, 41-50.	5.6	108
15	Analysis at medium scale of low-resolution DInSAR data in slow-moving landslide-affected areas. ISPRS Journal of Photogrammetry and Remote Sensing, 2009, 64, 598-611.	11.1	99
16	Interferometric SAR phase unwrapping using Green's formulation. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 720-727.	6.3	93
17	The September 26, 1997 Colfiorito, Italy, earthquakes: Modeled coseismic surface displacement from SAR interferometry and GPS. Geophysical Research Letters, 1999, 26, 883-886.	4.0	93
18	Imaging of Single and Double Scatterers in Urban Areas via SAR Tomography. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3497-3505.	6.3	92

#	ARTICLE	IF	CITATIONS
19	Detection of Double Scatterers in SAR Tomography. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 3567-3586.	6.3	91
20	Actively growing anticlines beneath catania from the distal motion of Mount Etna's Decollement measured by SAR interferometry and GPS. Geophysical Research Letters, 2000, 27, 3409-3412.	4.0	77
21	Urban subsidence inside the city of Napoli (Italy) Observed by satellite radar interferometry. Geophysical Research Letters, 2000, 27, 1961-1964.	4.0	68
22	Extension of 4-D SAR Imaging to the Monitoring of Thermally Dilating Scatterers. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 5296-5306.	6.3	68
23	On Center-Beam Approximation in SAR Motion Compensation. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 276-280.	3.1	67
24	The combination of DInSAR and facility damage data for the updating of slow-moving landslide inventory maps at medium scale. Natural Hazards and Earth System Sciences, 2013, 13, 1527-1549.	3.6	64
25	The use of IFSAR and classical geodetic techniques for caldera unrest episodes: application to the Campi Flegrei uplift event of 2000. Journal of Volcanology and Geothermal Research, 2004, 133, 247-260.	2.1	63
26	Robust phase-unwrapping techniques: a comparison. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 2355.	1.5	61
27	Title is missing!. Journal of Seismology, 2000, 4, 479-499.	1.3	60
28	Multilook SAR Tomography for 3-D Reconstruction and Monitoring of Single Structures Applied to COSMO-SKYMED Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2776-2785.	4.9	58
29	Role of processing geometry in SAR raw data focusing. IEEE Transactions on Aerospace and Electronic Systems, 2002, 38, 441-454.	4.7	57
30	Phase difference-based multichannel phase unwrapping. IEEE Transactions on Image Processing, 2005, 14, 960-972.	9.8	57
31	Potentials and Limitations of Moon-Borne SAR Imaging. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3009-3019.	6.3	57
32	Focused SAR Image Formation of Moving Targets Based on Doppler Parameter Estimation. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3460-3470.	6.3	57
33	Geometric and kinematic characterization of landslides affecting urban areas: the Lungro case study (Calabria, Southern Italy). Landslides, 2017, 14, 171-188.	5.4	54
34	A Null-Space Method for the Phase Unwrapping of Multitemporal SAR Interferometric Stacks. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 2323-2334.	6.3	50
35	Using C/X-band SAR interferometry and GNSS measurements for the Assisi landslide analysis. International Journal of Remote Sensing, 2013, 34, 4083-4104.	2.9	50
36	A general framework and related procedures for multiscale analyses of DInSAR data in subsiding urban areas. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 105, 186-210.	11.1	49

#	ARTICLE	IF	CITATIONS
37	SIR-C/X-SAR multifrequency multipass interferometry: A new tool for geological interpretation. <i>Journal of Geophysical Research</i> , 1996, 101, 23127-23148.	3.3	46
38	A two-dimensional region growing least squares phase unwrapping algorithm for interferometric SAR processing. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1999, 37, 2215-2226.	6.3	46
39	Transport Infrastructure Surveillance and Monitoring by Electromagnetic Sensing: The ISTIMES Project. <i>Sensors</i> , 2010, 10, 10620-10639.	3.8	46
40	Global and local phase-unwrapping techniques: a comparison. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 1997, 14, 2702.	1.5	44
41	Postseismic displacement of the 1999 Athens earthquake retrieved by the Differential Interferometry by Synthetic Aperture Radar time series. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	41
42	Postseismic Deformation Monitoring With the COSMO/SKYMED Constellation. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2011, 8, 696-700.	3.1	41
43	Nonlocal Adaptive Multilooking in SAR Multipass Differential Interferometry. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015, 8, 1727-1742.	4.9	41
44	SAR Interferometry and Tomography: Theory and Applications. <i>Academic Press Library in Signal Processing</i> , 2014, 2, 1043-1117.	0.8	38
45	Minimum mean square error space-varying filtering of interferometric SAR data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2002, 40, 11-21.	6.3	35
46	4-D SAR Imaging: The Case Study of Rome. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2010, 7, 236-240.	3.1	33
47	Monitoring Buildings at Landslide Risk With SAR: A Methodology Based on the Use of Multipass Interferometric Data. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2020, 8, 91-119.	9.6	29
48	X-Band Airborne Differential Interferometry: Results of the OrbiSAR Campaign Over the Perugia Area. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2008, 46, 489-503.	6.3	28
49	Azimuth-to-Frequency Mapping in Airborne SAR Data Corrupted by Uncompensated Motion Errors. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2013, 10, 1493-1497.	3.1	28
50	LMMSE 3-D SAR Focusing. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009, 47, 214-223.	6.3	25
51	Multi-Look in GLRT-Based Detection of Single and Double Persistent Scatterers. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018, 56, 5125-5137.	6.3	24
52	Assimilation of GPS-Derived Atmospheric Propagation Delay in DInSAR Data Processing. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015, 8, 784-799.	4.9	21
53	Fast and Accurate ISAR Focusing Based on a Doppler Parameter Estimation Algorithm. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2017, 14, 349-353.	3.1	19
54	Comment on "Pre-Collapse Space Geodetic Observations of Critical Infrastructure: The Morandi Bridge, Genoa, Italy" by Milillo et al. (2019). <i>Remote Sensing</i> , 2020, 12, 4011.	4.0	18

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55	Synthetic aperture radar interferometry using one bit coded raw and reference signals. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 1245-1253.	6.3	17
56	Improved Small Baseline processing by means of CAESAR eigen-interferograms decomposition. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 139, 1-13.	11.1	15
57	Phase Calibration Based on Phase Derivative Constrained Optimization in Multibaseline SAR Tomography. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6779-6791.	6.3	15
58	Multiresolution Detection of Persistent Scatterers: A Performance Comparison Between Multilook GLRT and CAESAR. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 3088-3103.	6.3	15
59	Super-Resolution Multi-Look Detection in SAR Tomography. Remote Sensing, 2018, 10, 1894.	4.0	14
60	Analysis of Building Vulnerability to Slow-Moving Landslides via A-DInSAR and Damage Survey Data. , 2017, , 899-907.		12
61	Surface Currents Derived from SAR Doppler Processing: An Analysis over the Naples Coastal Region in South Italy. Journal of Marine Science and Engineering, 2020, 8, 203.	2.6	11
62	Capabilities of the TELAER airborne SAR system upgraded to the multi-antenna mode. , 2012, , .		10
63	Detection of Partially Coherent Scatterers in Multidimensional SAR Tomography: A Theoretical Study. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 7534-7548.	6.3	10
64	Monitoring Lakes Surface Water Velocity with SAR: A Feasibility Study on Lake Garda, Italy. Remote Sensing, 2021, 13, 2293.	4.0	10
65	A land subsidence study via DInSAR technique over large urbanised areas. , 2007, , .		7
66	Field Trial of a Coherent, Widely Distributed, Dual-Band Photonics-Based MIMO Radar With ISAR Imaging Capabilities. Journal of Lightwave Technology, 2022, 40, 6626-6635.	4.6	7
67	Detection of double scatterers in SAR Tomography. , 2009, , .		6
68	<title>New algorithm for processing hybrid strip-map/spotlight-mode synthetic aperture radar data</title>. , 2000, , .		5
69	Potential of SAR for monitoring transportation infrastructures: an analysis with the multi-dimensional imaging technique. Journal of Geophysics and Engineering, 2012, 9, S1-S9.	1.4	5
70	Recent Advances in Radar Imaging [From the Guest Editors]. IEEE Signal Processing Magazine, 2014, 31, 15-158.	5.6	5
71	ISAR motion compensation based on a new Doppler parameters estimation procedure. , 2015, , .		5
72	A comparison of atmospheric phase delay estimated by ASAR and MERIS over the Campania area. International Journal of Remote Sensing, 2012, 33, 1507-1528.	2.9	4

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73	ISAR add-on for focusing moving targets in very high resolution spaceborne SAR data. , 2014, , .		4
74	Estimation and Compensation of Phase Shifts in SAR Focusing of Spotlight Data Acquired With Discrete Antenna Steering. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1921-1925.	3.1	4
75	Comparative study of SAR tomographic reconstruction algorithms. , 2015, , .		4
76	Sea State Observation through a Three-Antenna Hybrid XT/AT InSAR Configuration: A Preliminary Study Based on the InSAeS4 Airborne System. Remote Sensing, 2017, 9, 792.	4.0	4
77	<title>Finite-element method for interferometric SAR phase unwrapping</title>. , 1996, , .		3
78	Monitoring thermal dilations with millimetre sensitivity via multi-dimensional SAR imaging. , 2012, , .		3
79	Advanced interferometric and 3-/4-/5-D tomographic processing of SAR data. , 2016, , .		2
80	A Radar Eye on the Moon: Potentials and Limitations for Earth Imaging. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2010, 6, 330-334.	0.4	2
81	Inversion algorithms and PS detection in SAR tomography, case study of Bucharest city. Telfor Journal, 2016, 8, 20-25.	0.7	2
82	Experimental Dual-band Coherent Photonics-based Radar Network with ISAR Imaging. , 2022, , .		2
83	4D SAR Focusing: A Tool for Improved Imaging and Monitoring of Urban Areas. , 2008, , .		1
84	Detection of partially coherent scatterers in multidimensional SAR tomography: a theoretical study. Proceedings of SPIE, 2013, , .	0.8	1
85	Remote Sensing and In-Situ Measurements for the Structural Monitoring of Historical Monuments: The Consoli Palace of Gubbio, Italy. Lecture Notes in Civil Engineering, 2021, , 119-128.	0.4	1
86	Partially Coherent Scatterers in SAR Tomography: An Application on COSMO-SkyMed Data. , 2021, , .		1
87	A Multi-Resolution GLRT Test for the Detection of Persistent Scatterers in SAR Tomography. , 2020, , .		1
88	X-band airborne differential interferometry over the Perugia area. , 2007, , .		0
89	Detection of single scatterers in multilook SAR Tomography. , 2015, , .		0
90	Analysis of the Statistical Correlation in the Context of Multi-Look SAR Tomography. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
91	Scattering Component Selection and Multi-resolution Detection of Persistent Scatterers in Sparsely Urbanized Areas. , 2020, , .		0
92	Mapping of the risk of coastal erosion for two case studies: Pianosa island (Tuscany) and Piscinas (Sardinia). Proceedings E Report, 0, , 713-722.	0.0	0